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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of )  
 ) ET Docket No. 99-254  
Closed Captioning Requirements )  
for Digital Television Receivers )

REPLY COMMENTS OF  
TELECOMMUNICATIONS FOR THE DEAF, INC.

TDI, formerly known as Telecommunications for the Deaf, Inc., and by undersigned counsel, respectfully submits these reply comments in response to comments filed on October 18, 1999 on the Federal Communications Commission's ("FCC's" or "Commission's") Notice of Proposed Rulemaking regarding the adoption of technical standards for the display of closed captions on digital television ("DTV") receivers.<sup>1</sup> TDI is a national consumer organization that seeks to represent the interests of the twenty-eight million Americans who are deaf, hard of hearing, late deafened and deaf-blind. TDI's mission is to promote equal access to telecommunications and media for people who are deaf, late deafened, hard of hearing or deaf-blind. It accomplishes the mission via the following activities: consumer education and involvement, technical assistance and consulting, application of existing and emerging technologies, networking and collaboration, uniformity of standards, and national policy development and advocacy.

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<sup>1</sup> Notice of Proposed Rulemaking, ET Docket No. 99-254, released August 2, 1999.

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## ***Introduction***

In its comments, TDI urged the Commission to incorporate all of the EIA-708-A standard<sup>2</sup> into the FCC's proposed rules governing the incorporation of closed captioning capabilities in digital television sets. (TDI Comments, p. 2) It recommended that the Commission require digital picture screens of all sizes to be able to support closed captioning. (*Id.* at 8) Moreover, it contended that there should be no "gap" in the availability of this critical television feature during the transition from analog to digital technology. (*Id.*) To achieve this goal, it urged the Commission to require all associated components to comply with the TDCA. (*Id.* at 9). Finally, to ensure that the rapid advances in technology do not leave behind this important group of consumers, TDI recommended that the Commission expedite adoption of its rules and establishes a short – but attainable – time frame in which manufactures and providers of captioned programming must implement the new rules. (*Id.* at 10).

## ***The FCC Must Incorporate the Entire EIA-708 Standard Into Its Rules Without Delay.***

Many parties filed comments that support TDI's position that the only way the FCC can ensure that the promised benefits of digital television ("DTV") actually accrue to persons who are deaf, late deafened, hard of hearing or deaf-blind is to require that the industry adopt the entire EIA-708 standard, and not just Section 9.<sup>3</sup> The National Association of the Deaf and the Consumer

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<sup>2</sup> Although TDI based its comments on the EIA-708-A standard, it currently supports the most recent version of the standard. In recognition of the evolving nature of the standard's development, TDI will reference the standard merely as "EIA-708."

<sup>3</sup> In its Comments, TDI set forth the many reasons that the standards of Section 9 alone are insufficient. It is important for the Commission to recognize that the restrictive features of Section 9 alone will hamper the ability of persons of deaf-blindness or low vision to enjoy the flexibility that comes with the various features of the EIA-708 standard.

Action Network (“NAD/CAN”) correctly note that manufacturers, caption providers and programmers need the baseline standards for implementing closed captions in DTVs to be defined, and that incorporation by reference is not sufficient. (NAD/CAN Comments at p. 7) Similarly, VITAC argues that Section 9 of the standard was not intended to stand alone, and that the Commission must adopt the entire standard or there will be confusion in the marketplace. (VITAC Comments at p. 4) The industry’s response to the instant proceeding is proof of this confusion.

TDI fears that without a clear directive from the FCC, the industry will fail to implement the features necessary to create a “level viewing field” for the portion of the population that requires special technological adaptations to mainstream home electronics in order fully to partake of the information age. Two arguments consistently posed by industry illustrate that industry cannot or will not act without this specific guidance from the FCC. On the one hand, industry submits that market forces will produce the features that this community needs. On the other, industry contends that one year does not offer adequate time for them to implement the features they fear the FCC will impose. If strong market forces existed, there would be no stopping the industry as it rushed forward to develop a myriad of new captioning features for DTVs. Instead, it seeks delay and reduced requirements. This response underscores the need for the FCC to impose specific requirements and specific time frames to ensure that the benefits of digital captioning are neither delayed nor denied.

***The Special Population of Deaf, Hard of Hearing, Late Deafened, and Deaf Blind Lacks Market Power to Ensure Industry Action.***

Thomson Consumer Electronics (“Thomson”) contends that the mandate of the entire EIA-708 standard would stifle market-driven innovations, and would deprive manufacturers of the flexibility necessary to foster such innovation. (Thomson Comments at p. 6) Home Box Office (“HBO”) submits that “[t]he Commission should leave it to the creative instincts of each caption

provider and to its market incentives to offer a high quality of programming service.” (HBO Comments at p. 5) TDI views these pleas as nothing more than an excuse behind which to hide the understandable fact that no one wants to be the first to invest in research and development, only to find that it has “created a Betamax.” The market for which these captioning features are specifically designed is expanding,<sup>4</sup> but its voice is not being heard.

Clearly, if the special population of deaf, late deafened, hard of hearing or deaf-blind possessed adequate market power, industry would be racing ahead of the market. It is only through proceedings such as these, that the Commission provides a forum in which TDI and other consumer groups can collectively express their market’s unique demands. TDI urges the industry to consider the comments filed in this proceeding by entities such as the NAD, the CAN, Self Help for Hard of Hearing People (“SHHH”), and the Alexander Graham Bell Association for the Deaf and Hard of Hearing (“AGBA”) as the voice of the market. As passage of numerous Federal acts to facilitate the mainstreaming of all Americans illustrates, this broad-based special market must rely upon governmental mandates – such as the FCC adopting EIA-708 in its entirety – to simulate the demand to which industry will respond.

This is not to say that there is no room for innovation. It is important, however, to distinguish between baseline requirements and true innovation. TDI and the special constituency groups it represents view the standards that EIA-708 offers (choices of font type, size, color, and positioning; and ease of use of these features (*i.e.*, clearly marked buttons on the remote control, retention of

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<sup>4</sup> The market for captioned television is growing as the population as a whole ages and persons who enjoyed unimpaired hearing and sight for most of their lives join the ranks of those who have always depended upon captioning to watch television. Moreover, captioned sets are often located in airports and health clubs, where external noise or the presence of multiple sets tuned to different channels requires captioning for all viewers to fully understand the program.

selections when the set is turned off, etc.)) as *baseline requirements*, not innovative features. The sooner the industry adopts these minimal requirements, the sooner it can actually pursue innovations. TDI would be sorely disappointed if these minimum requirements were denied in the name of innovation.

***The FCC Must Place Adoption and Implementation of Its Proposed Rules on the Fast Track.***

TDI urges the Commission to ensure that there is no delay in bringing closed captioned features to the DTV market. Yet, the Consumer Electronics Manufacturers Association (“CEMA”) seeks a three-year delay in the effective date of the Commission’s proposed rules, arguing that design and testing is still ongoing. (Comments at p. 13) The National Association of Broadcasters (“NAB”) predicts an unreliable closed captioning solution if the Commission does not extend the time frame, citing the twenty years of experience with analog television that preceded the advent of analog closed captioning. (NAB Comments at p. 10) Home Box Office (“HBO”) proposes a twelve-year schedule, citing the unavailability of captioning equipment. (HBO Comments at p. 8) General Instruments Corporation (“GIC”) and Toshiba America Consumer Products, Inc. (“Toshiba”) similarly seek a longer implementation period than is proposed by the FCC and supported by the captive users who await the deployment of the expanded features anticipated in the digital environment. (GIC Comments at p.14; and Toshiba Comments at p. 3)

It should come as no surprise to manufacturers, broadcasters, or captioners that they would be expected to implement, at the very least,<sup>5</sup> the same features available in NTSC television into the new digital line of products. Digital technology has not appeared overnight. Closed captioning has

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<sup>5</sup> In some instances, the standards from Section 9 alone provide less functionality than is available in analog captioning today. See TDI Comments at p. 6.

been evolving (and, fortunately, improving) during the last twenty years. Indeed, the industry itself developed the very standards set forth in EIA-708. Were the industry to respond to the market-driven demand it claims will encourage the development of the necessary closed captioned features for DTV, it would be well on its way to exploiting the new opportunities that digital technologies allow. Instead, it claims that the range of features this special market seeks is too broad, and one year is not enough time to implement even minimal standards.

Once a standard is adopted – and for the reasons set forth in its original comments, TDI continues to urge the Commission to adopt the full EIA-708 standard<sup>6</sup> – a significant portion of the uncertainty that is delaying the that industry will be eliminated. As VITAC notes, failure to adopt the entire standard will result in confusion in the marketplace. (VITAC Comments at p. 4) Standards ensure that no single entity – whether a captioning company, manufacturer, cable or broadcast television provider – will alone carry the burden of pursuing a path which may not meet with market acceptance. Working with the standard, captioning companies can invest in software with the knowledge that the captions they provide will be compatible with digital television sets, VCRs, set-top converters, and other ancillary components. Manufacturers can work with broadcasters towards a common goal of compatibility. Persons who are deaf, hard of hearing, late deafened and deaf-blind will more rapidly purchase DTVs, knowing that even the first models to the market will offer the features they require.<sup>7</sup>

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<sup>6</sup> *Id.* at pp. 2-6.

<sup>7</sup> If the full panoply of features is not adopted, a consumer of closed captioned capable DTVs would face the equivalent of a consumer with normal hearing trying to determine which sets offered volume control or picture hue control, or whether the set would remember to which channel it had been tuned when it was turned off. Persons who are deaf, hard of hearing, late deafened and deaf-blind should not have to struggle to determine whether the baseline features they require are available.

***Adoption of the Full EIA-708 Standard Will Minimize Industry Costs.***

Industry also argues that only Section 9 of EIA-708 should be adopted to minimize industry costs. The National Cable Television Association (“NCTA”) argues that the extensive features required by EIA-708 should not be required in light of the Commission’s recent imposition of analog captioning requirements. (NCTA Comments at p. 3) Thompson suggests that the magnitude of costs associated with “an aggressive timetable would be considerable and may slow the downward price movement of DTV equipment.” (Thomson Comments at p. 7) HBO claims that the imposition of “significant new burdens would strain resources to the breaking point.” (HBO Comments at p. 8) Given that resources are finite, TDI is sensitive to the need to ensure that the limited funds are prudently channeled toward the solutions that this market really wants and needs. By adopting the standard that consumers support, the FCC will provide industry with a clear and specific goal, allowing industry’s investment to be more focused and certain. More significantly, the greater investment made and consideration given to these necessary features at the beginning of the product life cycle, the less industry will ultimately pay if retrofitting features can be avoided.

***Adoption of the Full EIA-708 Standard Will Facilitate Technical Solutions.***

Finally, many commenting parties also highlight potential technological difficulties that must be overcome as DTV evolves. Media Captioning Services (“MCS”) is concerned that the software to generate captions consistent with EIA-708 will not be commercially available for four years. (MCS Comments at p. 2) The NAB suggests that broadcasters would be required to create two different captioned works and transmit both NTSC and DTV signals. (NAB Comments at p. 2). GIC, the only party arguing against adoption of EIA-708 at all, discusses the incompatibility of current equipment with the new standard. (GIC Comments at pp. 6-7) The NCTA also contends that the proposed

standards are inconsistent with DVS-157 carriage format, and its adoption requires significant modifications of existing equipment. (NCTA Comments at pp. 5-6) TDI submits that delaying adoption of the entire industry-generated standard will not help resolve these matters, but will instead only serve to further delay industry's efforts to find technological solutions.

### ***Conclusion***

The sooner the FCC adopts rules and requires implementation of the new digital captioning features, the sooner industry can address the very real technical issues that must be resolved. Consumers of captioning services, however, have spoken in a single voice: adoption of anything less than the complete EIA-708 standard is unsatisfactory, discriminatory, and contrary to the spirit of the TDCA and the public statements of the FCC. Resources and time will be unnecessarily spent if industry continues to struggle with a question that this special group of consumers already has so clearly answered. Instead of focusing on what features to provide, the industry should turn its attention to the matter of how to offer these features in a timely and economical fashion. Only by adopting the full EIA-708 standard will the FCC allow the industry to focus in on its objectives, and implementation of the standards within a year will become a realistic goal.



For the foregoing reasons, TDI urges the Commission to: (1) adopt the full standard of EIA-708; (2) mandate the incorporation of closed captioning on screens as small as is technically feasible; (3) require manufactures to incorporate these features in television sets, set-top converters, VCRs, and other ancillary components and (4) adopt rules and require implementation of these standards on an accelerated basis to ensure that this group of consumers has access to mainstream telecommunications and media.

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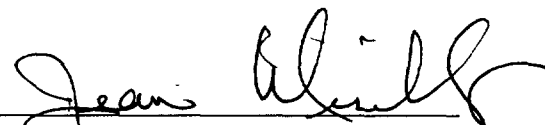
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